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SC22/WG11's Responses to comments

on the Working Draft on:

Guidelines For Language Bindings

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Responses to Member Boies Comments

ACTION:

For information to SC22 Member Bodies.

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Responses to the SC22 Comments on the Language Bindings Document (SC22 N507) 26 April 1989

The WG11 replies to the comments received on the Language Bindings Document follow.

CANADA

1. Guideline 12 and case sensitivity with Modula-2.

Changed wording to state that differences in system routines should not depend on case sensitivity alone. That is, we don't want the same name to have a different functionality based only on case sensitivity ("Plot" and "plot").

2. Guideline 23 and Modula-2 not allowing punctuation in names.

It is a guideline (or suggestion) and if a particular language committee feels that their community can be served without following this guideline there is no need to follow it.

3. Ref issue 15 is hard to achieve.

True -- see discussion on this issue on pages 60 and 61.

DENMARK

Comments were never received, so we assume there were none.

GERMANY

1. A table of contents or index would be helpful for the reader.

There is a table of contents in the revised version. We will investigate producing an index.

UK

1. Wrong draft submitted.

The correct draft will be used as the baseline for the next version.

US

1. Guideline 8 -- suggested replacement.

No change made. We feel that more than language semantics is involved and that the current wording says this. Also, a system facility should be specified, not described.

2. Guideline 9 -- a complete specification of abstract datatypes in language standards is not needed.

We disagree. However, the comment for guideline 9 was reworded. One of the major problems in defining bindings for a system facility to different languages is the imprecise description of datatypes in the various languages. What works for Extended Pascal may not work for other languages. This is precisely why WG11 was created and it is attempting to deal with this problem.

3. Guideline 16 -- documentation guidelines should not be part of these guidelines.

As stated in the paragraph following Guideline 16, documentation is required to enable potential clashes to be detected. It is agreed that documentation is required of different kinds for different needs, which makes complete specification difficult, but that is not what the guideline attempts; it merely states some requirements needed to assist those groups developing bindings. We cannot therefore see that such a guideline can reasonably be objected to. Note that we did move the guideline to follow the comment paragraph because that paragraph partially deals with guideline 15 and 16.

4. Guideline 19 should be moved to be with 2 or a cross-reference should be added.

A cross-reference was added to guideline 19. 19 belongs in section 3.4.2.2.

5. Guidelines 22 and 23 -- the guidelines should not include language specifications since programming languages differ.

These are guidelines for future standards. See Section 1, Introduction, especially 1.2 Scope. We feel that the matters addressed by guidelines 22 and 23 should not be overlooked in future language developments.

SC21 committees have a significant problem with these particular points, and the guidelines were included to help alleviate such problems in the future.

Section 3.4.2.4, page 26, bottom of page -- the reference to the IEEE group implies that it is studying the topic and that no other group is doing so.

The reference was deleted.

7. Guideline 31 -- a complementary guideline should be added and 31 should appear earlier.

Moved 31 to section 3.1 as Guideline 5 and added a note worded as was suggested. The note should be a guideline, but it is outside of the scope of this document.

8. Guidelines 35, 36, and 37 -- a general comment.

It is agreed that parameter definitions, ordering, and combinations are very language dependent, and that ultimately decision on such matters will be taken by the language groups. These, however, are guidelines to facilitate binding for those groups to take into account when making those decisions. The comment did not request any particular action

and so no changes have been made.

9. Guideline 48 -- it should be omitted.

For the reasons stated in reply to comment 3, we believe that some guidance with respect to documentation requirements is appropriate, and so cannot accept total deletion of guideline 48. Also, we again fear that taking such a step might result in adverse comment from other member bodies.

However, it is accepted that some of the detail in this guideline, however useful, is inappropriate, especially that concerned with presentation. This guideline will therefore be rewritten to cover the content of the documentation and the need for commonality of structure as an aid to cross-referencing and checking of completeness.

10. Guideline 57 -- alien syntax should not be defined in a language.

The guideline was deleted and new text was added to the paragraph discouraging adding alien syntax.

11. Future directions, page 40, para 5 -- disagree that there should be more commonality between language specifications.

This does not appear to be a general opinion within SC22. The general view appears to be that unnecessary diversity should be reduced, among other things, in order to reduce costs of implementing and using facilities that can be shared between languages. This does not mean that necessary diversity, to provide new facilities and approaches, is discouraged.

12. Examples, page 46 -- the lines of hyphens are confusing - maybe use ellipsis.

Changed to ellipsis.

13. Issue 14 -- argument for pro1 does not relate to issue.

Argument b (Pro 1) has been reworded.

14. Issue 15 -- argument g, contra c, does not relate to anything else in this issue.

Argument g (contra c) has been dropped and c has been reworded.

15. Issue 23 -- more arguments needed -- some suggested.

Suggested arguments added.